

Title (en)

IMAGE QUALITY ASSESSMENT AND IMPROVEMENT FOR PERFORMING OPTICAL CHARACTER RECOGNITION

Title (de)

BILDQUALITÄTSBEURTEILUNG UND -VERBESSERUNG ZUR DURCHFÜHRUNG VON OPTISCHER ZEICHENERKENNUNG

Title (fr)

ÉVALUATION ET AMÉLIORATION DE LA QUALITÉ D'IMAGE DESTINÉES À EFFECTUER UNE RECONNAISSANCE OPTIQUE DE CARACTÈRES

Publication

EP 3532992 A4 20200708 (EN)

Application

EP 16920098 A 20161031

Priority

- US 201615337285 A 20161028
- US 2016059768 W 20161031

Abstract (en)

[origin: US2018121756A1] Techniques are disclosed for performing optical character recognition (OCR) by assessing and improving quality of electronic documents to perform the OCR. For example a method for identifying information in an electronic document includes obtaining a reference image of the electronic document, distorting the reference image by adjusting different sets of one or more parameters associated with a quality of the reference image to generate a plurality of distorted images, analyzing each distorted image to detect the adjusted set of parameters and corresponding adjusted values, determining an accuracy of detection of the set of parameters and the adjusted values, and training a model based at least on the plurality of distorted images and the accuracy of the detection, wherein the trained model determines at least a first technique for adjusting a set of parameters in a second image to prepare the second image for optical character recognition.

IPC 8 full level

G06V 30/224 (2022.01); **G06V 30/40** (2022.01); **G06V 30/10** (2022.01)

CPC (source: EP US)

G06F 18/28 (2023.01 - US); **G06V 30/1914** (2022.01 - EP US); **G06V 30/224** (2022.01 - US); **G06V 30/40** (2022.01 - EP US); **G06V 30/416** (2022.01 - US); **G06V 30/10** (2022.01 - EP US)

Citation (search report)

- [A] US 2001043748 A1 20011122 - WESOLKOWSKI SLAWOMIR B [CA], et al
- [A] EP 2806374 A1 20141126 - TATA CONSULTANCY SERVICES LTD [IN]
- [A] SAUVOLA J ET AL: "Automated document image preprocessing management utilizing grey-scale image analysis and neural network classification", IMAGE PROCESSING AND ITS APPLICATIONS, 1997., SIXTH INTERNATIONAL CONFERENCE ON DUBLIN, IRELAND 14-17 JULY 1997, LONDON, UK, IEE, UK, vol. 2, 14 July 1997 (1997-07-14), pages 502 - 506, XP006508343, ISBN: 978-0-85296-692-1, DOI: 10.1049/CP:19970944
- [A] STUBBERUD P ET AL: "Adaptive image restoration of text images that contain touching or broken characters", DOCUMENT ANALYSIS AND RECOGNITION, 1995., PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON MONTREAL, QUE., CANADA 14-16 AUG. 1995, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, vol. 2, 14 August 1995 (1995-08-14), pages 778 - 781, XP010231010, ISBN: 978-0-8186-7128-9, DOI: 10.1109/ICDAR.1995.602018
- See references of WO 2018080546A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10108883 B2 20181023; **US 2018121756 A1 20180503**; AU 2016427827 A1 20181206; AU 2016427827 B2 20191114; AU 2020200058 A1 20200130; AU 2020200058 B2 20201105; CA 3026089 A1 20180503; CA 3026089 C 20200428; EP 3532992 A1 20190904; EP 3532992 A4 20200708; US 10366309 B2 20190730; US 11030477 B2 20210608; US 2019050675 A1 20190214; US 2019286935 A1 20190919; WO 2018080546 A1 20180503

DOCDB simple family (application)

US 201615337285 A 20161028; AU 2016427827 A 20161031; AU 2020200058 A 20200103; CA 3026089 A 20161031; EP 16920098 A 20161031; US 2016059768 W 20161031; US 201816138669 A 20180921; US 201916431555 A 20190604